

## REMARKS

Pursuant to 37 C.F.R. § 1.111, Applicants respectfully request reconsideration of the claim rejections set forth in the Office Action dated September 21, 2006.

### Summary

Claims 1 – 3, 9, 10, and 25 – 29 were rejected.

Claims 4 – 8 were objected to as being dependent upon a rejected base claim.

Claims 27 and 28 are currently amended.

Claims 1 – 10 and 25 – 29 are currently pending.

### Specification

Applicants have amended the title as generally suggested by the Examiner to the following: MAGNETIC HEAD ACTUATOR INCLUDING PIEZOELECTRIC ELEMENTS FIXED TO THE ARMS OF A FIRED GLASS-CERAMIC SUBSTRATE. Amendments to the Specification begins on page 2 of this paper.

### Allowable Subject Matter

Claims 4 – 8 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### Claims Rejections

Claims 1, 9, 10, and 25 – 29 were rejected under 35 U.S.C. § 102(e) as being anticipated by Shiraishi et al. (U.S. Patent No. 6,690,551).

Claim 1 recites, *inter alia*, the head-holding substrate comprises a fired glass-ceramic compact.

The Examiner notes “that the method limitation “fired” does not have a corresponding claimed physical result that results from the “fired” aspect and thus Shiraishi would not have had to actually disclose that the substrate is heated to meet product claims 1 and 9 in their present form” (Office Action dated September 21, 2006; page 3).

Applicant respectfully disagrees with the Examiner's interpretation. The feature "fired" is not a method limitation. The feature "fired" provides distinguishable physical characteristics that are related to the structure of the compact. The feature "fired" broadly relates to the physical characteristics of the compact after the process of heating has taken place. Accordingly, the physical characteristics of the feature "fired" are structural limitations that deserve full consideration under a product claim. Applicants respectfully request reconsideration of the claimed subject matter including the feature "fired" and in view of the remarks that follow.

However, even under the Examiner's interpretation of the claimed subject matter, "[i]t is well established that product claims may include process steps to wholly or partially define the claimed product. See *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA, 1972), and the cases cited therein. To the extent these process limitations distinguish the *product* over the prior art, they must be given the same consideration as traditional product characteristics [emphasis in original].” *In re Luck*, 476 F.2d 844, 120 USPQ 523 (CCPA, 1973).

Shiraishi et al. fail to disclose a fired glass-ceramic compact. In fact, Shiraishi et al. teach a contrary arrangement that is discussed in the Background of the present application. Shiraishi et al. teach “the main sections of the actuator are made of the elastic sintered ceramic such as ZrO<sub>2</sub> that is strong for bending, a shock resistance of the actuator itself increases” (column 7, lines 10 – 12). The arrangement taught by Shiraishi et al. has a main section of the actuator that would be deformed during firing because ceramics such as zirconia have high sintering temperatures (about 1500°C) and this deformation causes difficulty in achieving the necessary dimensional accuracy. Accordingly, claim 1 is allowable over the disclosure of Shiraishi et al.

Dependent claims 2 – 3 and 10 depend from an allowable base claim, so are allowable for at least this reason.

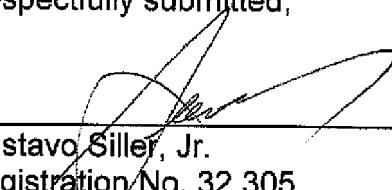
Independent claims 25 – 29 recite features that are similar to the distinguishable features of claim 1. Accordingly, claims 25 – 29 are allowable for at least the reasons discussed above for claim 1.

**Conclusion**

For at least the reasons presented above, the Applicants respectfully submit that the pending claims are in condition for allowance.

The Examiner is respectfully requested to contact the undersigned in the event that a telephone interview would expedite consideration of the application.

Respectfully submitted,



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